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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/637,574 | 08/14/2000 | Eiichi Hase | NIT-218 | 8053 |

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EXAMINER

SEFER, AHMED N

ART UNIT PAPER NUMBER

2826

DATE MAILED: 03/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/637,574

Applicant(s)

HASE ET AL.

Examiner

A. Sefer

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3, 4, 7, 8, 11, 12 and 15-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3, 4, 7, 8, 11, 12 and 15-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment filed on 11/26/2002 has been entered and new claims 17-26 have been added.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 3, 4, 7, 8, 11, 12, 15 and 16 are rejected under 35 U.S.C. 102(a) as being anticipated by Hase et al. (JP 2000-209006).

Hase et al. Disclose in figs. 1-3, 19 and 21 a high frequency circuit module provided with a first dielectric substrate 1 on which a semiconductor element 16 and matching circuits on the input side 2-5 and on the output side 9-12 respectively of the semiconductor element respectively formed, a first ground metal plate 33, and one or more second dielectric substrates 18 located between said first dielectric substrate and the first ground metal, wherein: a second ground metal 19 is provided on the surface of each of the second dielectric substrates, and the second ground metal provided on the surface of at least one of the second dielectric substrates being adjacent to the first dielectric substrate is formed in the shape in which a part 35/41 of the second ground metal opposite to the transmission line 9 of said matching circuit on the output side (as in claim 8) or the transmission line 2 of said matching circuit on the input side (as in

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claims 4 and 7) is removed while maintaining the dielectric substrate adjacent to the part of the second ground metal that is removed.

As to claims 11 and 12, Hase et al disclose in figs. 26 and 27 a high frequency circuit module used for power amplifier at the transmitting end.

As to claims 15 and 16, Hase et al disclose in figs. 26 and 27 a high frequency circuit module used for low noise amplifier at the receiving end.

4. Claims 17-26 are rejected under 35 U.S.C. 102(a) as being anticipated by Hase et al. (JP 2000-209006).

Hase et al. disclose in figs. 1-3, 19 and 21 a high frequency circuit module having a first dielectric substrate 1 on which a semiconductor element 16, an input-side matching circuit 2-5 and out-put side 9-12 matching circuit are formed; a first ground metal plate 33; a second dielectric substrate 18 located between said first dielectric substrate and said first ground metal; and a second ground metal 19 provided on the surface of said second dielectric substrate such that the second ground metal is located between said first dielectric substrate and said second dielectric substrate and is adjacent to said first dielectric substrate, wherein a portion 35 of said second ground metal is removed from the surface of said second dielectric substrate, said portion facing out-put side matching circuit provide on said first dielectric substrate such that said output side matching circuit faces said second dielectric substrate, wherein said second ground metal is formed such that said portion of said second ground metal is removed while maintaining the second dielectric substrate below said portion of said ground metal that is removed (as in claim 18).

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As to claim 19, Hase et al. disclose at least one additional dielectric substrate 24 located between said second dielectric substrate and said first ground metal.

As to claim 20, Hase et al. disclose at least one additional dielectric substrate 24 located between said second dielectric substrate and said first ground metal.

As to claim 21, Hase et al. disclose said portion of said second ground metal that is removed faces a transmission line 9 portion of said output-side matching circuit.

As to claims 22-26, Hase et al. disclose another portion 41 of said second ground metal that is removed from the surface of said second dielectric substrate, said portion facing said in-put side matching circuit, wherein said second ground metal is formed such that another portion of said second ground metal is removed while maintaining the second dielectric substrate below said another portion of said second ground metal that is removed (as in claim 23) and further comprising at least one additional dielectric substrate 24 located between said second dielectric substrate and said first ground metal (as in claims 24 and 25), wherein said another portion of said second ground metal that is removed faces a transmission line portion 2 of said in-put side matching circuit (as in claim 26).

Response to Arguments

5. Applicant's arguments filed 11/26/2002 have been fully considered but they are not persuasive. Neither Fig.1 nor page 11, lines 10-14 of the specification seem to support applicant's argument that a part 35 of ground metal 19 on the surface of the

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second layer dielectric substrate is removed without creating a hole or aperture through dielectric substrate 18.

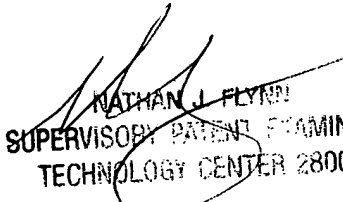
6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (703) 605-1227.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J Flynn can be reached on (703) 308-6601.

ANS
February 23, 2003


NATHAN J. FLYNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800